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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/699,396	10/31/2000	Shyam S. Bayya	79693	9262
7.	590 02/28/2003			
Associate Counsel Patents Code 1008.2			INER	
Naval Research 4555 Overlook	Ave S W		CLEVELAND, MICHAEL B	
Washington, DC 20375-5320			ART UNIT	PAPER NUMBER
			1762	
			DATE MAILED: 02/20/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.	Applicant(s)	
09/699,396	BAYYA ET AL.	
Examiner	Art Unit	
Michael Cleveland	1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 06 February 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

Examination (RCE) in compliance with 37 CFR 1.114.
PERIOD FOR REPLY [check either a) or b)]
a) The period for reply expires 3_months from the mailing date of the final rejection. b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f). Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).
1. A Notice of Appeal was filed on <u>06 February 2003</u> . Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. The proposed amendment(s) will not be entered because:
 (a) ∑ they raise new issues that would require further consideration and/or search (see NOTE below); (b) ∑ they raise the issue of new matter (see Note below);
(c) they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) they present additional claims without canceling a corresponding number of finally rejected claims.
NOTE: <u>See attached</u> .
3. Applicant's reply has overcome the following rejection(s): <u>See attached</u> .
4. Newly proposed or amended claim(s) would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. The a) affidavit, b) exhibit, or c) request for reconsideration has been considered but does NOT place the application in condition for allowance because:
6. The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7.⊠ For purposes of Appeal, the proposed amendment(s) a)⊠ will not be entered or b)☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed:
Claim(s) objected to:
Claim(s) rejected: <u>1, 3-8, 10-20</u> .
Claim(s) withdrawn from consideration:
8. The proposed drawing correction filed on is a) approved or b) disapproved by the Examiner.
9. Note the attached Information Disclosure Statement(s)(PTO-1449) Paper No(s)
10. Other:

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DETAILED ACTION

1. The proposed After Final amendment will not be entered because it raises new issues for further search and consideration, such as whether the proposed amendments to claims 1 and 13 render the claims unclear (However, see discussion below.), whether the proposed changes of "in the droplet direction" to claims 4-5 are clear and have support in the specification. The proposed amendment to claim 20, the proposed deletion of claim 14, an appropriate inclusion of units in claims 5 and 16-17, and the correction in the paragraph at p. 9, lines 3 would be entered if presented in a separate amendment.

Response to Arguments

2. Applicant's arguments filed 2/6/2003 have been fully considered but they are not persuasive.

Objections to the specification: Applicant's proposed modification at p. 9, line 3 would resolve the issue if presented in a separate amendment. The Examiner notes that the marked-up copy of the text should correspond to the *current* version rather than the *original* version.

Rejections under 35 USC 112, 2nd paragraph: The rejections of claims 1, 3, 6-8, 10-12, 15, and 18-20 under 35 USC 112, 2nd paragraph is withdrawn. See further discussion below:

A. "coating material" inclusive of "precursor"? Applicant's proposed amendments to claims 1 and 13 to resolve the issue are unnecessary in view of the discussion and would cloud the issue rather than correct the issue. Applicant's amendments to match this proposed amendment in claims 4-5, 16-17 and at p. 9, line 13 are also unnecessary Applicant's proposed cancelation of claim 14 would fully resolve this issue. See further discussion below:

It is clear from the discussion that final coating material may be derived from a precursor which is substantially different from the coating material (e.g., TEOS and silica) or from a precursor which is substantially the same as the coating material (e.g., sodium phosphate). The only obstacle to such interpretation is the presence of dependent claim 14. Thus, in claims 1, 3-8, 10-13, and 15-20, it is clear that the "precursor material" may yield a "coating material" which is substantially different (e.g., TEOS/silica) or substantially the same (sodium phosphate), the condition of the precursor in the solution (i.e., whether it is disassociated into ions) being

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substantially irrelevant to the language of the claims. Thus the rejection of these claims under 35 USC 112, 2nd paragraph for *this* reason is withdrawn.

The only remaining question, then, is what does claim 14 mean? Applicant's argument that the coating material is different from the precursor material on p. 6 (providing by example that the precursor for sodium phosphate is a solution of sodium ions and phosphate ions) is not consistent with the limitations of claims 10 and 20 which require that the "precursor solution includes a precursor material" and lists among the precursor materials "sodium phosphate", not "sodium ions and phosphate ions". Because Applicant's interpretation of claim 14 does not appear to be consistent with the other claims or the discussion (especially that on p. 7), its rejection under 35 USC 112, 2nd is maintained. Even if the comments were consistent, given that Applicant's arguments regarding the enablement of claim 14 (that no coating was deposited because the sodium and phosphate ions have not precipitated onto the particles), claim 14 would not appear to further limit parent claim 13 (which already requires that the precursor not precipitate before spraying). The issue could be resolved by canceling claim 14, as proposed by Applicant.

- B. "dilution ratio": The proposed amendments to include units in claims 5 and 16-17 (in a separate paper) would resolve the issue.
- C. "velocity": The proposed amendment would not resolve the issue because it is not clear what "in the droplet direction" means or whether it is supported by the specification as originally filed. The proposed amendment appears to mean that there velocity in any direction perpendicular to "the droplet direction" would be zero. (i.e., that the term "velocity" effectively means "speed", a non-vector unit which represents the overall magnitude). The Examiner is willing to withdraw the rejections of claims 4-5 and 16-17 under these grounds and to treat "velocity" in the claims as meaning "speed" upon Applicant's confirmation. No amendment to the claims (for this issue) would be necessary.
- D. "improving integrity": Applicant argues that the phrase is defined at p. 14, line 16. The argument is unconvincing because the "definition" also involves comparisons. That is, it is unclear what the "improvement" (or "tougher" or "more durable" is compared to: the uncoated phosphor? a particular prior art coating?)



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35 USC 112, 1st paragraph:

A. Claim 14: This issue is conflated with the issue of clarity, discussed above. The Examiner notes that Applicant's arguments on this issue that the term "coating material" may be the same, conflicts with the argument on the clarity issue where it is argued that the "precursor material" is different from the "coating material" because it is ionized in solution. The Examiner recommends deleting claim 14, as proposed by Applicant, to resolve the issue.

- B. All claims: Applicant has not addressed this rejection.
- C. Claim 20: The proposed amendment (in a separate paper) would resolve the issue.

35 USC 102(b):

The Examiner believes Applicant's assertion that the increase in viscosity described by Petersen is caused by gelation. Accordingly, the rejections under 35 USC 102 of claim 1, 13, and 14 are withdrawn.

35 USC 103:

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Applicant's response that preventing gelation would not have been obvious does not address the clear motivation of Strom '607, Anderson '922, and Okabe '911.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Cleveland whose telephone number is (703) 308-2331. The examiner can normally be reached on 8-5:30 M-F, with alternate Mondays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on (703) 308-2333. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 306-3186 for regular communications and (703) 306-3186 for After Final communications.



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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

MBC

February 27, 2003

SHRIVE P. BECX SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 1700